

## PROGRAMMING ARCHITECTURE FOR AN ANALOG PROGRAMMABLE SYSTEM ON A CHIP

### ABSTRACT OF THE INVENTION

- 5           A programmable analog device that introduces on a single chip a set of tailored analog blocks and elements that can be configured and reconfigured in different ways to implement a variety of different analog functions. The analog blocks can be electrically coupled to each other in different combinations to perform different analog functions. Each analog block includes analog
- 10 elements that have changeable characteristics that can be specified according to the function to be performed. Configuration registers define the type of function to be performed, the way in which the analog blocks are to be coupled, the inputs and outputs of the analog blocks, and the characteristics of the analog elements. The configuration registers can be dynamically programmed.
- 15 Thus, the device can be used to realize a large number of different analog functions and applications.